

SEQUENCE LISTING

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Asn Phe Phe Arg Pro Gly Phe Ser Val Asn Arg Lys Ile His His Thr																		
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Gln Ile Glu Asp Asp Asp Val Trp Ile Lys Met Leu Glu Glu Ala																		
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aaa tcc gat gtt aaa caa gaa ccc att tta tca aac tac tac tac gct																		246
Lys Ser Asp Val Lys Gln Glu Pro Ile Leu Ser Asn Tyr Tyr Tyr Ala																		
	60																	70
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Ser Ile Thr Ser His Arg Ser Leu Glu Ser Ala Leu Ala His Ile Leu																		
	75																	85
tcc gta aag ctg agc aat tta aac cta cca agc aac acg ctc ttc gaa																		342
Ser Val Lys Leu Ser Asn Leu Asn Leu Pro Ser Asn Thr Leu Phe Glu																		
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Leu Phe Ile Ser Val Leu Glu Glu Ser Pro Glu Ile Ile Glu Ser Thr																		
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gaa Glu	gct Ala	gcc Ala	gga Gly	tta Leu 45	tgg Trp	aca Thr	cag Gln	atc Ile	aag Lys 50	gcg Ala	gaa Glu	gct Ala	cgc Arg	cgt Arg 55	gat Asp	198
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ctt Leu	tgt Cys 90	tcc Ser	tca Ser	acg Thr	ctt Leu	tta Leu 95	tcc Ser	aca Thr	ctt Leu	tta Leu	tac Tyr 100	gat Asp	ctg Leu	ttc Phe	tta Leu	342
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ggt Gly	gac Asp	ggt Gly 235	tgt Cys	ttg Leu	att Ile	gga Gly	gct Ala 240	gga Gly	gcg Ala	act Thr	att Ile	ctt Leu 245	gga Gly	aat Asn	gtg Val	774
aag Lys 250	att Ile	ggt Gly	gca Ala	ggt Gly	gct Ala	aaa Lys 255	gta Val	gga Gly	gct Ala	ggt Gly 260	tct Ser	gtt Val	gtg Val	ctg Leu	att Ile	822
gac Asp 265	gtg Val	ctt Pro	tgt Cys	cga Arg	ggt Gly 270	act Thr	gcg Ala	gtt Val	ggg Gly	aat Asn 275	ccg Pro	gcg Ala	aga Arg	ctt Leu	gtc Val 280	870

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 10 15 20

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Asn His His Ser Phe Leu Leu Pro Ser Phe Val Ser Ser Lys Phe Lys	
25 30 35 40	
cac cat act tta tct cct cct cct tct cct cct cct cct cct atg	198
His His Thr Leu Ser Pro Pro Pro Ser Pro Pro Pro Pro Pro Met	
45 50 55	
gct gcg tgc atc gac acc tgc cgc act ggt aaa ccc cag att tct cct	246
Ala Ala Cys Ile Asp Thr Cys Arg Thr Gly Lys Pro Gln Ile Ser Pro	
60 65 70	
cgc gat tct tct aaa cac cac gac gat gaa tct ggc ttt cgt tac atg	294
Arg Asp Ser Ser Lys His His Asp Asp Glu Ser Gly Phe Arg Tyr Met	
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Asn Tyr Phe Arg Tyr Pro Asp Arg Ser Ser Phe Asn Gly Thr Gln Thr	
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Lys Thr Leu His Thr Arg Pro Leu Leu Glu Asp Leu Asp Arg Asp Ala	
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Glu Val Asp Asp Val Trp Ala Lys Ile Arg Glu Glu Ala Lys Ser Asp	
125 130 135	
atc gcc aaa gaa cct att gtt tcc gct tat tat cac gct tcg att gtt	486
Ile Ala Lys Glu Pro Ile Val Ser Ala Tyr Tyr His Ala Ser Ile Val	
140 145 150	
tct cag cgt tcg ttg gaa gct gcg ttg gcg aat act tta tct gtt aaa	534
Ser Gln Arg Ser Leu Glu Ala Ala Leu Ala Asn Thr Leu Ser Val Lys	
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Leu Ser Asn Leu Asn Leu Pro Ser Asn Thr Leu Phe Asp Leu Phe Ser	
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Gly Val Leu Gln Gly Asn Pro Asp Ile Val Glu Ser Val Lys Leu Asp	
185 190 195 200	
ctt tta gct gtt aag gag aga gat cct gct tgt ata agc tac gtt cat	678
Leu Leu Ala Val Lys Glu Arg Asp Pro Ala Cys Ile Ser Tyr Val His	
205 210 215	
tgt ttc ctt cac ttt aaa ggc ttc ctc gct tgt caa gcg cat cgt att	726
Cys Phe Leu His Phe Lys Gly Phe Leu Ala Cys Gln Ala His Arg Ile	
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235 240 245	
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250 255 260	
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Lys Ile Gly Thr Gly Ile Leu Leu Asp His Ala Thr Ala Ile Val Ile	
265 270 275 280	

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Gly Glu Thr Ala Val Val Gly Asn Asn Val Ser Ile Leu His Asn Val	
285	295
acg ctt gga gga acg ggg aaa cag tct gga gat agg cac ccg aag att	966
Thr Leu Gly Gly Thr Gly Lys Gln Cys	
300	305
ggc gat ggg gtt tgg att gga gct ggg act tgt att ttg ggg aat atc	1014
Gly Asp Gly Val Leu Ile Gly Ala Gly Thr Cys Ile Leu Gly Asn Ile	
315	320
acg att ggt gaa gga gct aag att ggt gcg ggg tgg gtg gtg ttg aaa	1062
Thr Ile Gly Glu Gly Ala Lys Ile Gly Ala Gly Ser Val Val Leu Lys	
330	340
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Asp Val Pro Pro Arg Thr Thr Ala Val Gly Asn Pro Ala Arg Leu Leu	
345	355
ggt ggt aaa gat aat ccg aaa acg cat gac aag att cct ggt ttg act	1158
Gly Gly Lys Asp Asn Pro Lys Thr His Asp Lys Ile Pro Gly Leu Thr	
365	375
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ctc tct ttt gtc caa tca aaa aga gtt tgt gat tct tct tta tgg tct	96
Leu Ser Phe Val Gln Ser Lys Arg Val Cys Asp Ser Ser Leu Ser Ser	
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cct tgg aga gat atg aat ggc gat gag ctt cct ttc gag agt ggt ttc	144
Pro Trp Arg Asp Met Asn Gly Asp Glu Leu Pro Phe Glu Ser Gly Phe	
35	40
gag gtt tac gct aag gga act cat aag tca gag ttt gac tgg aat ttg	192
Glu Val Tyr Ala Lys Gly Thr His Lys Ser Glu Phe Asp Ser Asn Leu	
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Leu Asp Pro Arg Ser Asp Pro Ile Trp Asp Ala Ile Arg Glu Glu Ala	
65	70

aaa Lys	ctt Leu	gag Glu	gca Ala	gag Glu	aaa Lys	gag Glu	cct Pro	att Ile	ttg Leu	agt Ser	agc Ser	ttc Phe	ttg Leu	tac Tyr	gct Ala	288
ggc Gly	atc Ile	tta Leu	gca Ala	cat His	gat Asp	tgt Cys	tta Leu	gag Glu	caa Gln	gct Ala	tta Leu	ggg Gly	ttt Phe	gtt Val	cta Leu	336
gcc Ala	aac Asn	cgt Arg	ctc Leu	caa Gln	aac Asn	cca Pro	acc Thr	ttg Leu	ttg Leu	gca Ala	aca Thr	caa Gln	ctc Leu	ttg Leu	gat Asp	364
ata Ile	ttt Phe	tat Tyr	ggt Gly	gtt Val	atg Met	atg Met	cat His	gac Asp	aaa Lys	ggt Gly	att Ile	cag Gln	agt Ser	tcg Ser	att Ile	432
cgc Arg	cat His	gat Asp	ctc Leu	cag Gln	gca Ala	ttt Phe	aaa Lys	gat Asp	cgt Arg	gat Asp	cct Pro	gct Ala	tgt Cys	ctg Leu	tcg Ser	480
tat Tyr	agt Ser	tct Ser	gct Ala	att Ile	tta Leu	cat His	ctg Leu	aag Lys	ggt Gly	tat Tyr	cat His	gcg Ala	tta Leu	caa Gln	gca Ala	528
tat Tyr	agg Arg	gtt Val	gcg Ala	cat His	aaa Lys	ctg Leu	tgg Trp	aac Asn	gaa Glu	ggg Gly	agg Arg	aaa Lys	cta Leu	tta Leu	gct Ala	576
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cca Pro	gcg Ala	gca Ala	aga Arg	att Ile	ggg Gly	gag Glu	gga Gly	ata Ile	ttg Leu	ttg Leu	gat Asp	cat His	gga Gly	act Thr	gga Gly	672
gtg Val	gtc Val	att Ile	ggt Gly	gag Glu	acc Thr	gct Ala	gtg Val	ata Ile	ggc Gly	aac Asn	ggt Gly	gtc Val	tcg Ser	ctc Ile	tta Leu	720
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ggt Gly	aac Asn	ata Ile	agc Ser	ata Ile	ggt Gly	gct Ala	gga Gly	gca Ala	atg Met	gta Val	gct Ala	gca Ala	ggt Gly	tta Ser	ctt Leu	864
gtg Val	tta Leu	aaa Lys	gac Asp	gtt Val	cct Pro	tcg Ser	cat His	agt Ser	gtg Val	gtg Val	gct Ala	gga Gly	aat Asn	cct Pro	gca Ala	912
aaa Lys	ctg Leu	atc Ile	agg Arg	gtc Val	atg Met	gaa Glu	gag Glu	caa Gln	gac Asp	ccg Pro	tct Ser	cta Leu	gca Ala	atg Met	aaa Lys	960
cac His	gat Asp	gct Ala	act Thr	aaa Lys	gag Glu	tta Phe	ttt Phe	cga Arg	cat His	gta Val	gct Ala	gat Asp	ggt Gly	tac Tyr	aaa Lys	1008

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ttg tct tct ctt cca atg att gtc tcc cgg aac ttt tct gcc aga gac 96
Leu Ser Ser Leu Pro Met Ile Val Ser Arg Asn Phe Ser Ala Arg Asp
20 25 30

gat gga gag acc ggt gac gag ttt cct ttc gag agg att ttc ccg gtt 144
Asp Gly Glu Thr Gly Asp Glu Phe Pro Phe Glu Arg Ile Phe Pro Val
35 40 45

tac gct aga gga acc ctt aat ccc gtg gcc gac ccc gtt ttg ctg gat 192
 Tyr Ala Arg Gly Thr Leu Asn Pro Val Ala Asp Pro Val Leu Leu Asp
 50 55 60

ttt acc aat tct agt tat gac cca att tgg gat tct ata aga gaa gaa 240
Phe Thr Asn Ser Ser Tyr Asp Pro Ile Trp Asp Ser Ile Arg Glu Glu
65 70 75 80

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Ala Lys Leu Glu Ala Glu Glu Glu Pro Val Leu Ser Ser Phe Leu Tyr
85 90 95

gct agt atc ttg tgg cat gac tgt tta gag caa gca ttg agt ttt gtt 336
Ala Ser Ile Leu Ser His Asp Cys Leu Glu Gln Ala Leu Ser Phe Val
100 105 110

cta gct aac cgt ctc gaa aac cct acc ttg ttg gca act cag ctt atg 384
Leu Ala Asn Arg Leu Gln Asn Pro Thr Leu Leu Ala Thr Gln Leu Met
115 120 125

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Asp Ile Phe Cys Asn Val Met Val His Asp Arg Gly Ile Gln Ser Ser
130 135 140

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Ile Arg Leu Asp Val Gln Ala Phe Lys Asp Arg Asp Pro Ala Cys Leu
145 150 155 160

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<212> Artificial sequence

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<212> DNA

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<213> Artificial sequence

<223> Artificial sequence description:
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43

<213> Artificial sequence

<223> Artificial sequence description:
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67

<213> Artificial sequence

<223> Artificial sequence description:
synthetic oligonucleotide

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